

REMARKS/ARGUMENTS

Claims 34-36, 39-53, and 83-106 are pending. Claims 37, 38, 54, 55, and 66-69 have been canceled without prejudice. Claims 47 and 50 are withdrawn pursuant to the restriction requirement. Claims 34 and 39 have been amended. New claims 88-106 have been added. No new matter has been introduced. Applicants believe the claims comply with 35 U.S.C. § 112.

Claims 34, 35, 83, and 84

Claims 34, 35, 83, and 84 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lam (US 5,043,663).

Applicants respectfully submit that independent claim 34 as amended is novel and patentable over Lam because, for instance, Lam does not teach or suggest graphically displaying on the display a distribution of defects in a wafer map format in which the defects are selected from the defect candidate images stored in the memory by applying the first standard. Nor does Lam teach or suggest changing the graphical display in wafer format in response to the change to the second standard by applying the second standard to the defect candidate images stored in the memory. These features are illustrated, for example, in Figures 15-18 in which the defect candidates are displayed in a wafer map format in relation to a threshold.

Lam merely discloses displaying angular defects in a tubular member (see Figs. 4a-4d). Nothing shows or suggests graphically displaying the defect in a wafer map format in relation to a first standard, or changing the graphical display of wafer format in response to the change to a second standard.

For at least the foregoing reasons, independent claim 34, and claims 35, 83, and 84 depending therefrom, are novel and patentable over Lam.

Claims 39-46, 48, 49, 51-53, and 85-87

Claims 39-46, 48, 49, 51-53, and 85-87 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schemmel et al. (US 6,504,948 B1) and Ishihara et al. (US 2001/0000460 A1).

Applicants respectfully submit that independent claim 39 as amended is novel and patentable over Lam because, for instance, Schemmel et al. and Ishihara et al. do not disclose or suggest displaying a two-dimensional defect candidate distribution in a wafer map format on a first screen in which defect candidates displayed on the first screen are selected from the defect candidate images stored in a memory by applying a standard. Nor do they disclose or suggest displaying on a second screen an expanded view of defect candidate stored in the memory, responsive to a selection of a defect candidate among defects in the wafer map format displayed on the first screen. These features are illustrated, for example, in Figures 15-18 in which the defect candidates are displayed in a wafer map format in relation to a threshold.

Schemmel et al. merely discloses displaying a map of the silicon wafer 16 that shows the good silicon chips 46 and the bad silicon chips 44 (see Fig. 2D). Ishihara et al. is cited for disclosing storing an expanded view of the defect candidate and displaying the expanded view of the defect candidate stored in memory. Nothing shows or suggests displaying on a first screen a two-dimensional defect candidate distribution in a wafer map format in relation to a first standard, or displaying on a second screen an expanded view of defect candidate stored in the memory response to a selection of a defect candidate among defects in the wafer map format. displayed on the first screen.

For at least the foregoing reasons, claim 39, and claims 40-46, 48, 49, 51-53, and 85-87 depending therefrom, are patentable over Schemmel et al. and Ishihara et al.

Claim 36

Claim 36 depends from claim 34 and stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Noguchi et al. (US 6,411,377 B1) and Lam (US 5,043,663). Noguchi et al. is cited for allegedly disclosing using an electron beam noise value for a SEM system to calculate the first standard.

Applicants respectfully assert that claim 36 is dependable at least due to its dependency from allowable claim 34, since Noguchi et al. and Lam both fail to teach or suggest graphically displaying on the display a distribution of defects in a wafer map format in which the defects are selected from the defect candidate images stored in the memory by applying the first standard, and changing the graphical display in wafer format in response to

the change to the second standard by applying the second standard to the defect candidate images stored in the memory, as recited in claim 34.

Claim 88

New claim 88 depends from independent claim 34 and further recites graphically displaying a relation between defect density and threshold in which the first standard is indicated. For the reasons discussed above, Applicants believe that claim 88 is patentable over the references for at least the same reasons that claim 34 is patentable.

Claims 89-106

At the suggestion of the Examiner, Applicants have added new independent claim 89 which combines the elements of previous claim 34 and the storage and display of expanded views for each defect candidate as recited in previous claim 39. New claims 90-106 depend from claim 89. Therefore, Applicants believe claims 89-106 are patentable.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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